CLAIMS

What is claimed is:

1   1.   A method for determining whether two or more parameters influence one another

2   within a communications network, comprising the steps of:

3   obtaining a set of measurements for two or more parameters within the

4   communications network;

5   determining a correlation between each of the two or more parameters;

6   determining a partial correlation between each of the two or more parameters;

7   determining whether the correlations and the partial correlations are statistically

8   significant; and

9   determining whether the two or more parameters, if any, influence one another based

10   on the statistically significant correlations and partial correlations.

1   2.   The method as recited in claim 1, wherein the two or more parameters include a key

2   performance indicator.

1   3.   The method as recited in claim 1, wherein the two or more parameters include an

2   indicator of network accessibility.

1   4.   The method as recited in claim 1, wherein the two or more parameters include an

2   indicator of service quality.

1   5.   The method as recited in claim 1, wherein the two or more parameters include an

2   indicator of dropped handoffs.

1   6.   The method as recited in claim 1, wherein the two or more parameters include an

2   indicator of designation failures.

1   7.   The method as recited in claim 1, wherein the two or more parameters include an

2   indicator of digital page failures.

1   8.   The method as recited in claim 1, wherein the two or more parameters are measured

2   within one or more wireless network cells.

1   9.   The method as recited in claim 1, wherein the two or more parameters are measured

2   within a cluster of wireless network cells.

1   10.   The method as recited in claim 1, wherein the two or more parameters are measured

2   at one or more switches.

1 11. The method as recited in claim 1, wherein the two or more parameters are measured

2 at a network level.

1 12. The method as recited in claim 1, further comprising the step of storing the

2 measurements for the two or more parameters in a data storage mechanism.

1 13. The method as recited in claim 1, wherein the step of obtaining the set of

2 measurements for the two or more parameters comprises the step of retrieving the set of

3 measurements for the two or more parameters from a data storage mechanism.

1 14. The method as recited in claim 1, wherein the step of obtaining the set of

2 measurements for the two or more parameters comprises the steps of:

3 requesting the set of measurements for the two or more parameters from one or more

4 network devices; and

5 receiving the set of measurements for the two or more parameters from one or more

6 network devices.

1 15. The method as recited in claim 1, further comprising the steps of:

2 identifying a problem within the communications network;

3 identifying the two or more parameters that relate to the problem; and

4 using the parameters that influence one another to solve the problem.

1   16.   A computer program embodied on a computer readable medium for determining

2   whether two or more parameters influence one another within a communications network,

3   comprising:

4   a code segment for obtaining a set of measurements for the two or more parameter

5   within the communications network;

6   a code segment for determining a correlation between each of the two or more

7   parameters;

8   a code segment for determining a partial correlation between each of the two or more

9   parameters;

10   a code segment for determining whether the correlations and the partial correlations

11   are statistically significant; and

12   a code segment for determining whether the two or more parameters, if any, influence

13   one another based on the statistically significant correlations and partial correlations.

1   17.   The computer program as recited in claim 16, wherein the two or more parameters

2   include a key performance indicator.

1   18.   The computer program as recited in claim 16, wherein the two or more parameters

2   include an indicator of network accessibility.

1   19.   The computer program as recited in claim 16, wherein the two or more parameters

2   include an indicator of service quality.

1   20.   The computer program as recited in claim 16, wherein the two or more parameters

2   include an indicator of dropped handoffs.

1   21.   The computer program as recited in claim 16, wherein the two or more parameters

2   include an indicator of designation failures.

1   22.   The computer program as recited in claim 16, wherein the two or more parameters

2   include an indicator of digital page failures.

1   23.   The computer program as recited in claim 16, wherein the two or more parameters are

2   measured within one or more wireless network cells.

1   24.   The computer program as recited in claim 16, wherein the two or more parameters are

2   measured within a cluster of wireless network cells.

1   25.   The computer program as recited in claim 16, wherein the two or more parameters are

2   measured at one or more switches.

1   26.   The computer program as recited in claim 16, wherein the two or more parameters are

2   measured at a network level.

1   27.   The computer program as recited in claim 16, further comprising a code segment for

2   storing the measurements for the two or more parameters in a data storage mechanism.

1   28.   The computer program as recited in claim 16, wherein the code segment for obtaining

2   the set of measurements for the two or more parameters comprises a code segment for

3   retrieving the set of measurements for the two or more parameters from a data storage

4   mechanism.

1   29.   The computer program as recited in claim 16, wherein the code segment for obtaining

2   the set of measurements for the two or more parameters comprises:

3   a code segment for requesting the set of measurements for the two or more

4   parameters from one or more network devices; and

5   a code segment for receiving the set of measurements for the two or more parameters

6   from one or more network devices.

1 30. A system for determining whether two or more parameters influence one another

2 within a communications network, comprising:

3   a computer;

4   a data storage mechanism communicably coupled to the computer;

5   an interface communicably coupled to the computer for communicably coupling the

6 computer to one or more network devices; and

7   the computer obtaining a set of measurements for the two or more parameters within

8 the communications network, determining a correlation between each of the two or more

9 parameters, determining a partial correlation between each of the two or more parameters,

10 determining whether the correlations and the partial correlations are statistically significant,

11 and determining whether the two or more parameters, if any, influence one another based on

12 the statistically significant correlations and partial correlations.

1 31. The system as recited in claim 30, wherein the two or more parameters include a key

2 performance indicator.

1 32. The system as recited in claim 30, wherein the two or more parameters include an

2 indicator of network accessibility.

1 33. The system as recited in claim 30, wherein the two or more parameters include an

2 indicator of service quality.

1   34.   The system as recited in claim 30, wherein the two or more parameters include an

2   indicator of dropped handoffs.

1   35.   The system as recited in claim 30, wherein the two or more parameters include an

2   indicator of designation failures.

1   36.   The system as recited in claim 30, wherein the two or more parameters include an

2   indicator of digital page failures.

1   37.   The system as recited in claim 30, wherein the two or more parameters are measured

2   within one or more wireless network cells.

1   38.   The system as recited in claim 30, wherein the two or more parameters are measured

2   within a cluster of wireless network cells.

1   39.   The system as recited in claim 30, wherein the two or more parameters are measured

2   at one or more switches.

1   40.   The system as recited in claim 30, wherein the two or more parameters are measured

2   at a network level.

1   41.   The system as recited in claim 30, wherein the computer stores the measurements for

2   the two or more parameters in the data storage mechanism.

1   42.   The system as recited in claim 41, wherein the computer obtains the set of

2   measurements for the two or more parameters from the data storage mechanism.

1   43.   The system as recited in claim 41, wherein the computer obtains the set of

2   measurements for the two or more parameters by requesting the set of measurements for the

3   two or more parameters from the one or more network devices via the interface, and

4   receiving the set of measurements for the two or more parameters from one or more network

5   devices via the interface.